

In the Claims

1. (Cancelled)
2. (Previously Presented) The method according to claim 11, wherein the indicating reactant is a gaseous reactant.
3. (Previously Presented) The method according to claim 11, wherein the indicating reactant is sulfide gas.
4. (Cancelled)
5. (Cancelled)
6. (Cancelled)
7. (Previously Presented) The method according to claim 13, further comprising a step of forming said hydrogen sulfide gas by contacting acetic acid with an aqueous solution of sodium sulfide.
- 8.-10. (Cancelled)
11. (Previously Presented) A method of detecting the presence of a corrosion inhibitor on a microelectronic device having an exposed copper surface, said method comprising:
 - (a) cleaning said microelectronic device having an exposed copper surface and a sacrificial copper coupon with a cleaning solution comprising a corrosion inhibitor;
 - (b) rinsing said microelectronic device having an exposed copper surface and said sacrificial copper coupon with a rinsing solution; and
 - (c) exposing only said sacrificial copper coupon to an indicating reactant, wherein said exposure results in a visible color change to said sacrificial copper coupon within a predetermined time if said corrosion inhibitor has been removed from the copper coupon.

12. (Cancelled)

13. (Previously Presented) The method according to claim 11, wherein the indicating reactant is hydrogen sulfide gas.

14. (Cancelled)

15. (Cancelled))

16. (Cancelled)

17. (Previously Presented) The method according to claim 7, wherein the step of forming the hydrogen sulfide gas comprises introducing the acetic acid into the aqueous solution of sodium sulfide.

18. (Previously Presented) The method of claim 17, wherein the acetic acid is introduced at room temperature.

19. (Previously Presented) The method according to claim 13, further comprising a step of forming the hydrogen sulfide gas by contacting an acid selected from the group consisting of citric acid, ascorbic acid, hydrochloric acid and sulfuric acid with an aqueous solution of sodium sulfide.

20. (Previously Presented) The method according to claim 11, wherein said cleaning with a cleaning solution comprising a corrosion inhibitor results in the buildup of a residual amount of the corrosion inhibitor on both the microelectronic device having an exposed copper surface and the sacrificial copper coupon.

21. (Previously Presented) The method according to claim 11, wherein the rinsing solution comprises deionized water.

22. (Previously Presented) The method according to claim 11, further comprising drying the microelectronic device having an exposed copper surface and the sacrificial copper coupon subsequent to rinsing and prior to exposing the sacrificial copper coupon to the indicating reactant.

23. (Previously Presented) A method of detecting the presence of a corrosion inhibitor on a microelectronic device having an exposed copper surface wherein said microelectronic device has been contacted with a cleaning solution comprising said corrosion inhibitor, said method comprising

(a) contacting a sacrificial copper element with the cleaning solution comprising said corrosion inhibitor; and

(b) contacting said sacrificial copper element with an indicating reactant, wherein said contacting with the indicating reactant results in a visible color change to an area of said sacrificial copper element where said corrosion inhibitor has been removed from the copper element.

24. (Previously Presented) The method of claim 23, wherein the microelectronic device and the sacrificial copper element are contacted with said cleaning solution comprising said corrosion inhibitor at the same time.

25. (Previously Presented) The method of claim 23, wherein the sacrificial copper element is contacted with the indicating reactant for a predetermined amount of time necessary to cause the visible color change to the area of said sacrificial copper element where said corrosion inhibitor has been removed from the copper element.

26. (Previously Presented) The method of claim 23, wherein the microelectronic device and the sacrificial copper element are rinsed with a rinsing solution prior to contacting the sacrificial copper element in step (b).

27. (Previously Presented) The method according to claim 23, wherein the indicating reactant is hydrogen sulfide gas.

28. (Previously Presented) The method according to claim 26, wherein the rinsing solution comprises deionized water.
29. (New) The method according to claim 23, wherein the indicating reactant is a gaseous reactant.
30. (New) The method according to claim 23, wherein the indicating reactant is sulfide gas.
31. (New) The method according to claim 27, further comprising a step of forming said hydrogen sulfide gas by contacting acetic acid with an aqueous solution of sodium sulfide.